

Material Safety Data Sheet

Revision Date: 01/06/09



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I. PRODUCT IDENTIFICATION

Catalog Number / Product Name: 32011, 32011-5XX, & 32111 / Aroclor 1254 Mix
Revision Number: 6
Intended use: For Laboratory use only

II. HAZARD IDENTIFICATION

Emergency Overview:

Physical Hazards: F - Highly flammable
Health Hazards: Xn - Harmful

Routes of Entry: Ingestion Absorption Contact Inhalation
Target Organs Potentially Affected By Exposure: skin, eyes, respiratory system, CNS, PNS
Chemical Interactions That Change Toxicity: None Known

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation: Can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.
Skin Contact: Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
Skin Absorption: May cause irritation and minor systemic damage. Harmful if absorbed through the skin.
Eye Contact: Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.
Ingestion Irritation: Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea. Harmful if swallowed.
Ingestion Toxicity: Toxic if swallowed. May cause target organ failure and/or death.

Long-Term (Chronic) Health Effects:

Carcinogenicity: No data.
Reproductive and Developmental Toxicity: No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Inhalation: Upon prolonged and/or repeated exposure, can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.
Skin Contact: Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
Skin Absorption: Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause minor systemic damage.

Material Safety Data Sheet

Revision Date: 01/06/09

III. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	EINEC #	% Composition
hexane	110-54-3	203-777-6	99.900000
aroclor® 1254	11097-69-1		0.100000

IV. FIRST-AID MEASURES

Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen.
Eyes:	Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.
Skin Contact:	Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.
Ingestion:	Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS.

V. FIRE FIGHTING MEASURES

Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and keep exposed material from being damaged by fire.
Fire and/or Explosion Hazards:	Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a Class B fire. Vapors are heavier than air and may travel to a source of ignition and flash back.
Fire Fighting Methods and Protection:	Do not enter fire area without proper protection including self-contained toxic breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use water spray/fog for cooling.
Hazardous Combustion Products:	Carbon dioxide, Carbon monoxide

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section VIII of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.
Methods for Clean-up:	Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section VIII at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

VII. HANDLING AND STORAGE

Handling Technical Measures and Precautions:	Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment.
Storage Technical Measures and Conditions:	Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition.

Material Safety Data Sheet

Revision Date: 01/06/09

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

United States:

Chemical Name	CAS No.	IDLH	ACGIH STEL	ACGIH TLV-TWA	OSHA Exposure Limit
hexane	110-54-3	1100 ppm IDLH (10% LEL)	1000 ppm	50 ppm TWA	500 ppm TWA; 1800 mg/m3 TWA
aroclor® 1254	11097-69-1	5 mg/m3 IDLH		0.5 mg/m3 TWA	0.5 mg/m3 TWA (54% chlorine)

United Kingdom:

Chemical Name	CAS No.	EINEC No.	WEL-STEL	WEL-TWA
hexane	110-54-3	203-777-6	60 ppm STEL; 216 mg/m3 STEL	20 ppm TWA; 72 mg/m3 TWA
aroclor® 1254	11097-69-1		No data.	No data.

France:

Chemical Name	CAS No.	EINEC No.	VLCTs-STEL	VME-TWA
hexane	110-54-3	203-777-6	No data.	20 ppm VME (restrictive limit); 72 mg/m3 VME (restrictive limit)
aroclor® 1254	11097-69-1		No data.	0.5 mg/m3 VME

Germany:

Chemical Name	CAS No.	EINEC No.	VELs
hexane	110-54-3	203-777-6	50 ppm TWA (exposure factor 8); 180 mg/m3 TWA (exposure factor 8)
aroclor® 1254	11097-69-1		0.05 ppm TWA (exposure factor 8); 0.7 mg/m3 TWA (exposure factor 8)

Personal Protection:

Engineering Measures: Local exhaust ventilation is recommended when generating excessive levels of vapors from handling or thermal processing.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.

Eye Protection: Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

Skin Protection: Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work

IX. PHYSICAL AND CHEMICAL PROPERTIES

Odor:	Mild
pH:	No data available.
Vapor Density:	2.97 (air = 1)
Melting Point:	-95 °C
Flash Point:	No data available.
Flammability:	Highly Flammable
Specific Gravity:	0.672 g/cm3 at 15 °C
Evaporation Rate:	No data available.
Odor Threshold:	No data available.
Solubility:	Negligible; 0-1%
VOC % by weight:	No data available.
Molecular Weight:	No data available.

X. STABILITY AND REACTIVITY:

Stability:	Stable under normal conditions.
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Material Safety Data Sheet

Revision Date: 01/06/09

Materials to Avoid / Chemical Incompatibility: Strong oxidizing agents

XI. TOXICOLOGICAL INFORMATION:

Component Toxicological Data:

NIOSH:

Chemical Name**CAS No.****LD50/LC50**

Hexane

110-54-3

Inhalation LC50 Rat: 48000 ppm/4H; Oral LD50 Rat:25 g/kg;
Dermal LD50 Rabbit:3000 mg/kg
Oral LD50 Rat: 1010 mg/kgPolychlorinated biphenyl (aroclor
1254)

11097-69-1

Component Carcinogenic Data:

OSHA:

Chemical Name**CAS No.**

Aroclor 1254

11097-69-1

Present

ACGIH:

Chemical Name**CAS No.**

Chlorodiphenyl (54% chlorine)

11097-69-1

A3 - Confirmed Animal Carcinogen with Unknown
Relevance to Humans

NIOSH:

Chemical Name**CAS No.**

Chlorodiphenyl (54% chlorine)

11097-69-1

potential occupational carcinogen

NTP:

Chemical Name**CAS No.**

No data available.

IARC:

Chemical Name**CAS No.****Group No.**

No data.

Group 1

No data.

Group 2A

No data.

Group 2B

XII. ECOLOGICAL INFORMATION:

Overview:Moderate ecological hazard. This product may
be dangerous to plants and/or wildlife.**Mobility:**

No data

Persistence:

No data

Bioaccumulation:

No data

Degradability:

No data

Ecological Toxicity Data:

0

XIII. DISPOSAL CONSIDERATIONS:

Waste Description of Spent Product:

Spent or discarded material is a hazardous waste.

Disposal Methods:Dispose of by incineration following Federal, State,
Local, or Provincial regulations.**Waste Disposal of Packaging:**Comply with all Local, State, Federal, and Provincial
Environmental Regulations.

XIV. TRANSPORTATION INFORMATION:

United States:**DOT Proper Shipping Name:**

Hexanes

UN Number:

UN1208

Hazard Class:

3

Packing Group:

II

32011, 32011-5XX, & 32111 / Aroclor 1254 Mix

Material Safety Data Sheet

Revision Date: 01/06/09

International:
IATA Proper Shipping Name: Hexanes
UN Number: UN1208
Hazard Class: 3
Packing Group: II

Marine Pollutant: No

XV. REGULATORY INFORMATION:

United States:

Chemical Name	CAS#	CERCLA	SARA 313	SARA EHS 313	TSCA
hexane	110-54-3	X	X	-	X
aroclor® 1254	11097-69-1	X	-	-	-

The following chemicals are listed on CA Prop 65:

Chemical Name	CAS #	Regulation
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State Right To Know Listing:

Chemical Name	CAS#	New Jersey	Massachusetts	Pennsylvania	California
hexane	110-54-3	X	X	X	-
aroclor® 1254	11097-69-1	-	X	X	X

EU Directives Classification:

Hazard Symbols



Risk Phrases: R48/20:Harmful: danger of serious damage to health by prolonged exposure through inhalation
R11:Highly Flammable

Safety Phrases: S36:Wear suitable protective clothing
S16:Keep away from sources of ignition - No smoking

XVI: ADDITIONAL INFORMATION

Prior Version Date: 06/28/06

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Revision Date: 01/06/09